Bibliography on stickiness Causes, measurements and consequences
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Introduction

Over the past few years, it has been noted that cottons from various origins induce a stickiness phenomenon during spinning and thus lead to considerable production losses. The problem is very complex because the stickiness of cottons from different geographical origins may be due to a set of factors, whose effects are detailed in the specialized literature:

- various contaminants such as crush kernel, insecticide, oil, wax, *etc.*…
- physiological sugars,
- entomogical sugars.

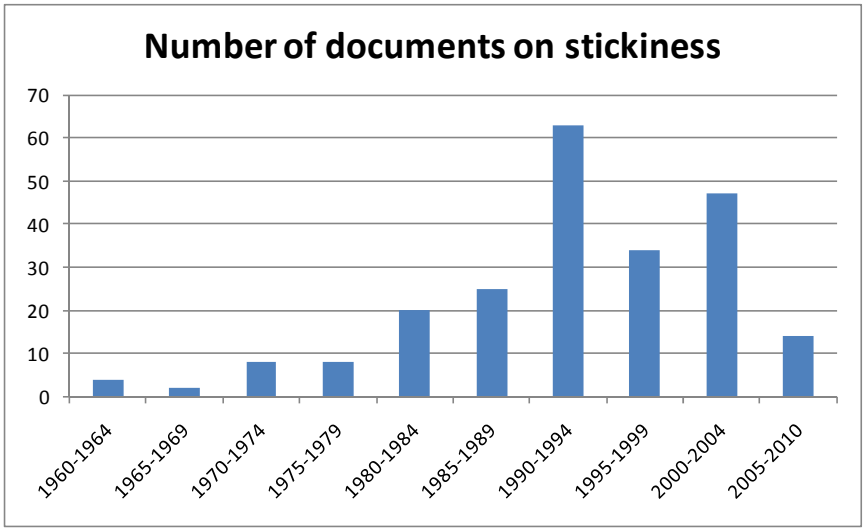
Stickiness is primarily due to insect excretions, known as honeydew, and mainly produced by aphids, *Aphis gossypii (*Glover), and whiteflies, *Bemisia tabaci* (Gennadius). These are composed of sugars, which give the cotton its sticky potential.

When no control system is in place to determine its stickiness level, a production may be labeled in its entirety as "sticky cotton" and, as a consequence, is subjected to systematic downgrading. However, preliminary studies have shown that even in countries that suffer particularly from stickiness, a significant proportion of the harvest is not contaminated. It is therefore essential that the stickiness of the cotton produced is monitored and evaluated.

In order to allow everyone to learn more about this contamination, we decided to prepare this extract of the available literature. We retained around 214 references out of thousands of available references, focusing on the cause of stickiness, on the possible means of evaluation and/or measurement and on major consequences during fibre processing.

The initial bibliography covers a period going from the 1960's to 2008.

At the end of this initial bibliography, we added the new references found between 2008 (last ITMF ICCTM conference) to March 2010 (the actual ITMF ICCTM conference). The low number of new citations itself tells a lot about research effort on this topic … and maybe on the importance of this contamination in the real life.



If some references are missing in this list, please provide them to Jean-Paul GOURLOT through the ITMF secretariat.

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